

531,016

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number
WO 2004/036922 A1

(51) International Patent Classification⁷: **H04N 9/31,**
H05B 41/392, G03B 21/20

GmbH, Weisshausstr. 2, 52066 Aachen (DE). **MOENCH,**
Holger [DE/DE]; c/o Philips Intellectual Property &
Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).

(21) International Application Number:
PCT/IB2003/004385

(74) Agent: **VOLMER, Georg**; Philips Intellectual Property &
Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).

(22) International Filing Date: 7 October 2003 (07.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
102 48 376.0 17 October 2002 (17.10.2002) DE

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for DE only*): **PHILIPS INTELLECTUAL
PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-
damm 94, 20099 Hamburg (DE).

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except DE, US*):
KONINKLIJKE PHILIPS ELECTRONICS N.V.
[NL/NL]; Groenewoudseweg 1, NL-5621 5621 BA Eind-
hoven (NL).

(72) Inventors; and

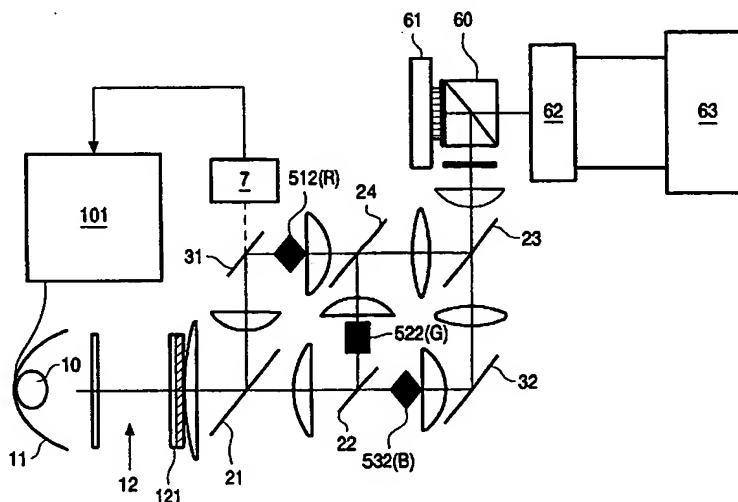
(75) Inventors/Applicants (*for US only*): **DEPPE, Carsten**
[DE/DE]; c/o Philips Intellectual Property & Standards

Published:

— with international search report

[Continued on next page]

(54) Title: IMAGE PROJECTOR WITH INTENSITY-CONTROLLED LIGHT SOURCE



(57) Abstract: The invention relates to a projection system for image representation, with a display (61), at least one lamp (10), and at least one sensor (7) for generating a sensor signal for monitoring and compensating changes in the luminous flux provided by the at least one lamp (10). To achieve a monitoring of the light quantity actually incident on the display (61) which is as accurate and as interference-free as possible, an optical component (31) is arranged in a light path between the lamp (10) and the display (61), which component allows a first light component to pass through and reflects a second light component such that one of the light components is directed at the display (61) and the other light component is directed at the sensor (7) arranged outside the light path. A sensor signal generated in this manner renders it possible to compensate for fluctuations in the luminous flux provided by the lamp (10) through the control of a lamp driver (101) in an effective manner and practically without light losses and without being influenced by the brightness fluctuations generated by a color modulator or other components of the system.

WO 2004/036922 A1